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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/582,637 10/20/00 OLOFSSON

S 194873US2PCT

EXAMINER

WM01/0912

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BARNIE, R

ART UNIT

PAPER NUMBER

2643

DATE MAILED:

09/12/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

EM

Office Action Summary

Application No.
09/582,637

Applicant(s)

OLOFSSON ET AL.

Examiner

Rexford Barnie

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Oct 20, 2000
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. _____
- ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 7 20) ☐ Other:

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DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. Claims 13-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Lechleider et al. (US Pat# 6,091,713).

Regarding claim 13, Lechleider teaches generating a test signal any a telephone device (102, column 4 lines 33-42) which goes off-hook from an on-hook state to generate a telephone call to a central station and also transmits caller ID or ANI information associated with the subscriber line (see column 5 lines 43-65, column 7 lines 23-47). The test signal would be analyzed by a qualification center or system (190 of fig. 1) in determining whether the line is capable of carrying or supporting digital signals.

Regarding claim 14-15, Lechleider teaches using a telephone apparatus or terminal which inherently goes from an on-hook position to an off-hook position.

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

4. Claims 1- 6, 9, 11-12, 16-21, 26-28 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lechleider et al. (US Pat# 6,091,713) in view of Bingel et al. (US Pat# 6,014,425).

Regarding claims 1 and 16, Lechleider teaches a method and system for estimating the ability of a subscribers loop to support broadband services comprising of using a testing means adapted to transmit a test signal, or test message, to a line to be tested, the test means (102, column 4 lines 33-41) is adapted to transmit the signal, or message, automatically mentioned test means has a unique identity code (ANI or telephone number) , and in that the test means is

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adapted to transmit the unique identity code whenever a test signal, or message, is transmitted to a centralized testing center (190 of fig. 1) but fails to teach incorporating testing means within a splitter but Bingel et al. teaches an apparatus and method for qualifying telephones and other attached equipment for optimum DSL operation comprising of a device (110) connected to a digital and analog devices which can also be used in performing measurements (see fig. 2, column 9 and so forth).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate testing means into any device associated with a subscriber terminal when testing a telephone line to determine whether it's capable of carrying digital services which can be used in providing a whole array of services such as internet services, broadband and so forth

Regarding claims 2-3 and 17-18, The combination teaches test signal is adapted for the performance of a specific line test or can be used in determining various factors such as power level, echo level, ability to support digital services and so forth (see column 6, column 7 lines 48-52 of Lechleider et al.).

Regarding claim 4-6 and 19-21, The combination fails to put a restriction on the testing signals and therefore, any signals capable of being analyzed at a receiving end can be used in determining whether a line is capable of supporting digital signals.

Regarding claims 9 and 26-27, The combination teaches a test means which would send a testing signal as programmed to do so (inherently).

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Regarding claim 11-12, The combination teaches the claimed subject matter (see fig. 2, column 7 lines 51-52 of Bingel et al.).

Regarding claims 28, and 30-33, The combination teaches storing test results for a plurality of subscribers ion a test qualification center (see 190 of fig. 1 of Lechleider) and (columns 7-8 of Lechleider et al.).

5. Claims 7, 8, 10, 22, 23 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lechleider et al. (US Pat# 6,091,713) in view of Bingel et al. (US Pat# 6,014,425) and further in view of EP (0 790977 A2, cited by applicant).

Regarding claims 7-8, 10, 22-23, and 29, The combination teaches analyzing a power spectral density but fails to teach a series of sinusoidal signals of known amplitude, each signal in the series having a different frequency, the series spanning a frequency range for which a line is to be tested but EP '977 teaches a method of transmitting a signal with ADSL characteristics which would have a sinusoidal form wherein its power density can be analyzed (see figs. 5, 7, 9, 11).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of EP '977 into that of the combination thus making it possible to analyze features such as power spectral density associated with the sinusoidal signal.

6. Claims 24-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lechleider et al. (US Pat# 6,091,713) in view of Bingel et al. (US Pat# 6,014,425) and further in view of Chan (US Pat# 5,974,115).

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Regarding claims 24-25, The combination fails to teach the claimed subject matter but Chan teaches a system and method for testing subscriber lines and terminating equipment comprising of requesting a plurality of test after which a test can be performed on line to determine the quality of the line (see column 8 lines 48-54) during a time interval after disconnection.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Chan into the combination thus making it possible to determine the quality of a subscriber line by testing the line as such.

Conclusion

7. Any inquiry concerning this communication or earlier communication from the examiner should be directed to REXFORD BARNIE whose telephone number is (703) 306-2744. The examiner can normally be reached on Monday through Friday from 8:30 to 6:00p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz, can be reached on (703) 305-4708.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to (703) 872-9314 and labeled accordingly (Please label **“PROPOSED/INFORMAL”** or **“FORMAL”**).

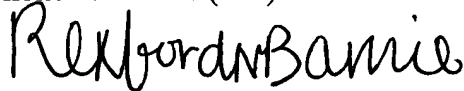
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Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is (703) 306-0377.

A handwritten signature in black ink that reads "Rexford Barnie". The signature is written in a cursive, slightly slanted style.

Rexford Barnie
Patent Examiner
RB 09/05/01.